

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-8 (Cancelled).

Claim 9 (New): A method for making a fermentation product comprising:
immobilizing a non-flocculent yeast in a bioreactor,
contacting a fermentation liquid with the immobilized non-flocculent yeast for a time
and under conditions suitable for fermentation, and
recovering the fermentation product(s),
wherein said non-flocculent yeast is immobilized on a carrier selected from the group
consisting of a chitosan-type carrier, alginic acid and carrageenan and
wherein said non-flocculent yeast satisfies the following conditions:
when a suspension of 0.6 g of said yeast is mixed with 20 ml of water,
1 ml of 0.5 M acetic acid buffer solution at pH 4.5 including 1,500 ppm calcium ion is
added to 9 ml of said suspension,
the resulting mixture is left to stand still for 5 minutes at room temperature, then
neither flocculation nor sedimentation of said yeast is observed.

Claim 10 (New) The method of Claim 9, wherein said non-flocculent yeast is
immobilized on a chitosan-type carrier.

Claim 11 (New) The method of Claim 9, wherein said non-flocculent yeast is
immobilized on alginic acid.

Claim 12 (New) The method of Claim 9, wherein said non-flocculent yeast is
immobilized on carrageenan.

Claim 13 (New) The method of Claim 9, wherein said non-flocculent yeast is
immobilized on a bead.

Claim 14 (New) The method of Claim 9, wherein said non-flocculent yeast is a liquor yeast.

Claim 15. (New) The method of Claim 9, wherein said non-flocculent yeast is a beer yeast.

Claim 16. (New) The method of Claim 9, wherein said non-flocculent yeast is *Saccharomyces cerevisiae*.

Claim 17 (New) The method of Claim 9, wherein said non-flocculent yeast is *Saccharomyces uvarum*.

Claim 18 (New) The method of Claim 9, wherein said bioreactor comprises a complete mixed vessel reactor.

Claim 19 (New) The method of Claim 9, wherein said bioreactor comprises a packed bed reactor.

Claim 20 (New) The method of Claim 9, wherein said bioreactor comprises a film reactor.

Claim 21 (New) The method of Claim 9, wherein said bioreactor comprises a fluidized bed reactor.

Claim 22 (New) The method of Claim 9, wherein said bioreactor comprises a lateral reactor.

Claim 23 (New) The method of Claim 9, wherein said fermentation liquid comprises malt.

Claim 24 (New) The method of Claim 9, wherein said fermentation liquid comprises a fruit juice.

Claim 25 (New) The method of Claim 9, wherein said fermentation liquid comprises a sugar liquid.

Claim 26 (New) The method of Claim 9, wherein said fermentation liquid comprises a cereal saccharified liquid.

Claim 27 (New) The method of Claim 9, wherein said fermented product is beer.

Claim 28 (New) The method of Claim 9, wherein said fermented product is a malt alcohol beverage.

Claim 29 (New) The method of Claim 9, wherein said fermented product is sake.

Claim 30 (New) The method of Claim 9, wherein said fermented product is wine.

Claim 31 (New) The method of Claim 9, wherein said fermented product is vinegar.

Claim 32 (New) The method of Claim 9, wherein said fermented product is soy sauce.

Claim 33 (New) A fermentation method comprising:

immobilizing a non-flocculent yeast on an immobilizing carrier within a bioreactor having a fluidized bed section,
supplying the bioreactor with a fermentation liquid,
extracting a part of the fermentation liquid from the downstream side of the fluidized bed section and returning the part of the fermentation liquid to the upstream side of the fluidized bed section, while forming a fluidized bed to carry out the fermentation of the fermentation liquid; and

recovering the thus obtained fermentation product from the bioreactor and
optionally supplying the bioreactor with a new fermentation liquid to repeat the
fermentation,

wherein said non-flocculent yeast satisfies the following conditions:

when a suspension of 0.6 g of said yeast is mixed with 20 ml of water,
1 ml of 0.5 M acetic acid buffer solution at pH 4.5 including 1,500 ppm calcium ion is added to 9 ml of said suspension,

the resulting mixture is left to stand still for 5 minutes at room temperature, then neither flocculation nor sedimentation of said yeast is observed.

Claim 34 (New) The method of Claim 33, wherein said non-flocculent yeast is immobilized on a carrier selected from the group consisting of a chitosan-type carrier, alginic acid and carrageenan.

Claim 35 (New) The method of Claim 33, wherein the immobilizing carrier is a chitosan type immobilizing carrier.

Claim 36 (New) The method of Claim 33, wherein the non-flocculent yeast is a non-flocculent liquor yeast and the fermentation product is a liquor.

Claim 37 (New) The method of Claim 33, wherein the non-flocculent yeast is a non-flocculent bear yeast and the fermentation product is a malt alcohol beverage.